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JUL 18 2003

**UNITED STATES DISTRICT COURT
DISTRICT OF SOUTH CAROLINA**LARRY W. PROPES, CLERK
COLUMBIA, SC**FRIENDS OF THE EARTH, INC., and
CITIZENS LOCAL ENVIRONMENTAL
ACTION NETWORK, INC.,**

Civil No. 3:92-2574-O

ENTERED**Plaintiffs,**JUL 18 2003 **USA****v.****FINDINGS OF FACT****AND****GASTON COPPER RECYCLING
CORPORATION,****CONCLUSIONS OF LAW****Defendant.**

This case is before the Court pursuant to a decision by the United States Court of Appeals for the Fourth Circuit, reversing this Court's May 1998 decision which dismissed the action for lack of jurisdiction. *Friends of the Earth Inc., et. al., v. Gaston Copper Recycling Corporation*, 204 F.3d 149 (4th Cir. 2000)(*en banc*). The action was commenced by the Plaintiffs Friends of the Earth (FOE) and Citizens Local Environmental Action Network (CLEAN) against the Defendant Gaston Copper Recycling Corporation under the Clean Water Act 33 U.S.C. §§ 1251-1387. The Plaintiffs allege that Gaston Copper has been illegally discharging a variety of pollutants

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into a South Carolina waterway. The Plaintiffs seek a declaratory judgment, injunctive relief and other statutory remedies.

In its answer, the Defendant *inter alia* denied the principal allegations of the complaint and additionally, asserted that the Plaintiffs lack standing to bring this action and sought the dismissal thereof. Upon consideration of the evidence pertaining to the Plaintiffs' standing, this Court concluded that the evidence failed to establish that any of the Plaintiffs' members had suffered injury that was causally related to the challenged conduct of the Defendant and, accordingly, that neither of the Plaintiffs have standing to proceed with the action. *Friends of the Earth v. Gaston Copper Recycling Corp.*, 9 F. Supp.2d 589 (D.S.C. 1998). A divided panel of the United States Court of Appeals for the Fourth Circuit affirmed this Court's decision. *Friends of the Earth v. Gaston Copper Recycling Corp.*, 179 F.3d 107 (4th Cir. 1999). Upon rehearing *en banc*, the Court of Appeals observed that "Wilson Shealy, a CLEAN member who owns a lake only four miles downstream from Gaston Copper's facility, testified that the illegal discharges caused him

and his family to reduce their use of his lake” and that “CLEAN also submitted various federal, state and private studies as evidence that the pollutants released by Gaston Copper adversely affected or threatened Shealy’s lake.” Therefore, the Court of Appeals *en banc* held that Shealy and hence CLEAN, have standing to sue.”^{1/} The Court vacated the panel opinion, reversed this Court’s judgment and remanded the case to this Court for a determination of whether Gaston Copper has discharged pollutants in excess of its permit limits. *Friends of the Earth v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 151, 163, n.1 (4th Cir. 2000).

1. This Court now concludes that further discussion of the standing of Friends of the Earth to maintain this action is unnecessary. The Supreme Court has held that if one of several plaintiff has standing, the others may remain in the action. *Watt v. Energy Action Educational Foundation*, 454 U.S. 151, 160 (1981); *Arlington Heights v. Metropolitan Housing Development Corp.*, 429 U.S. 252, 264 n.9 (1977); *Buckley v. Valeo*, 424 U.S. 1, 12 (1976) (*per curiam*).

I.

Congress enacted the Federal Water Pollution Control Act (Clean Water Act) in 1972 to restore and maintain the chemical, physical and biological integrity of the nation's waters. 33 U.S.C. §1251, et. seq. 33 U.S.C. §1311(a) provides that

[e]xcept as in compliance with this section and sections 302, 306, 307, 318, 402 and 404 of this Act, the discharge of any pollutant by any person shall be unlawful.

One such exception is stated in 33 U.S.C. §1342 which established the National Pollutant Discharge Elimination System (NPDES).

Pursuant to that exception, the Administrator of the Environmental Protection Agency (EPA) may issue permits authorizing the discharge of pollutants in accordance with specified conditions. 33 U.S.C. § 1342(a). Also, each state may establish and administer its own permit program which must conform with federal guidelines and be approved by the Administrator of the EPA. 33 U.S.C.

§1342(b). Upon failure to comply with its terms, the holder of a

state NPDES permit is subject to enforcement action by federal and state authorities. 33 U.S.C. §§ 1319, 1342 (b)(7).

If no enforcement action is taken by federal or state authorities, private citizens may commence civil actions against any person "alleged to be in violation of" the conditions of either a federal or state NPDES permit. 33 U.S.C. §1365(a)(1). If the citizen prevails in such an action, the court may order injunctive relief and/or impose civil penalties payable to the United States Treasury. 33 U.S.C. §1365(a); *Gwaltney v. Chesapeake Bay Foundation, Inc.*, 484 U.S. 49 (1987).

South Carolina has established a federally approved state NPDES program that is administered by the South Carolina Department of Health and Environmental Control (DHEC). South Carolina Code Ann. §1-23-370.

In 1984, a NPDES permit was issued by DHEC to AT&T Nassau Metals Corporation. The permit authorized the discharge of quantities of pollutants into the Boggy Branch of Bull Swamp Creek, and it set discharge limitations and monitoring requirements. Also,

the permit required monitoring on a monthly basis and it required the reporting of the monitoring results on a quarterly basis.

In September of 1990, AT&T Nassau Metals Corporation sold the property covered by its NPDES permit to the Defendant herein. The Defendant operated the facility under the same NPDES permit until March 1, 1991 when DHEC issued a new permit to the Defendant. The Phase I effluent limitations are substantially the same as those contained in the permit issued to the Defendant's predecessor in title. The Phase II effluent limits are more stringent for several parameters, including BOD, Cadmium, Copper, Lead, Zinc and pH. The 1991 permit contains a schedule of compliance for the Defendant to meet the Phase II effluent limits which included (1) submitting a preliminary engineering report by March 31, 1991; (2) submitting final plans and specifications for any waste water treatment plant upgrade required to meet Phase II effluent limits by September 1, 1991; and (3) complying with Phase II effluent limits by June 1, 1992. DHEC later issued a modification to the Defendant's NPDES permit to extend the deadline for compliance with the Phase II limits to March 14, 1993. *See Friends*

***of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 9 F. Supp.2d 589, 592 n.5 (D.S.C. 1998).**

This case is now before the Court by the direction of the Court of Appeals for a final resolution of all issues.

II.

In accordance with the remand order and pursuant to the requirements of Rule 52 of the Federal Rules of Civil Procedure, the Court now enters the following findings of fact and conclusions of law.

FINDINGS OF FACT

A.

THE PARTIES

1. Plaintiffs Friends of the Earth (FOE) and Citizens Local Environmental Action Network (CLEAN) bring this action on behalf of their members to protect their environmental, health, economic, recreational, and aesthetic interests in the quality of the Boggy Branch of Bull Swamp Creek and waters downstream and on behalf of their own interests in the accurate monitoring and reporting of

defendant's discharges. FOE and CLEAN are non-profit membership organizations. Pl. Exs. 508-509.

2. Defendant Gaston Copper Recycling Corporation is a South Carolina corporation that operated a metals smelting facility in Gaston, Lexington County, South Carolina, until 1995. Defendant purchased its facility from AT&T Nassau Metals, Inc., in September 1990. Pursuant to its NPDES permit, defendant discharged, and continues to discharge non-contact cooling water and treated stormwater from its facility into the Boggy Branch of Bull Swamp Creek. Pl. Ex. 504, discharge monitoring reports for Jan.-April 1997; Transcript of Hearing, August 11, 1997 (hereafter "Argument Tr."), p. 109 (admission of defendant's counsel); Defendant's Supplemental Proposed Findings of Fact and Conclusions of Law, August 27, 1997 (hereafter "Def. Supp. Proposed Findings"), p. 3.^{2/} The pollution results from rainwater coming into contact with scrap metal stored by defendant on its property. *Ibid.* The Boggy Branch

2. Defendant has filed two documents labelled "Defendant's Supplemental Proposed Findings of Fact and Conclusions of Law," one on August 11, 1997, and one on August 27, 1997. Unless otherwise noted, all of plaintiffs' citations are to the second document.

has been classified by DHEC as a Class A freshwater suitable for primary contact recreation;^{3/} secondary contact recreation;^{4/} a source for drinking water supply after conventional treatment; fishing; and the survival and propagation of a balanced indigenous aquatic community of flora and fauna. Pl. Ex. 105, Rationale, Section IIB, p. 000029. The Boggy Branch is a tributary of Bull Swamp Creek, which flows into the North Fork of the Edisto River.

B.

60-DAY NOTICE

3. On July 13, 1992, plaintiffs sent a 60-day notice letter to defendant under Section 505(b)(1)(A) of the Act describing defendant's violations of its permit. Pl. Ex. 170. The letter was accompanied by a list of eight violations relating to mercury, PCB's and flow.

3. Primary contact recreation means any activity with the intended purpose of direct water contact by the human body to the point of complete submergence, including but not limited to swimming, water skiing, and skin diving." S.C. Code Regs. 61-68B.

4. "Secondary contact recreation means any activity occurring on or near the water which does not have an intended purpose of direct water contact by the human body to the point of complete submergence, including but not limited to fishing, boating, canoeing, and wading." S.C. Code Regs. 61-68B.

4. Plaintiffs' notice letter stated that defendant failed to meet the deadline in its Schedule of Compliance of September 1, 1991, for submitting the plans and specifications from defendant's new facility (Pl. Ex. 170, pp. 1-2):

[T]he facility has failed to comply with the schedule for compliance in its permit. * * * In order to ensure that the Phase II limitations are met on a timely basis, the permit imposes a compliance schedule. The original permit schedule required submittal of Final Plans and Specifications to meet the Phase II limitations by September 1, 1991. The facility did not meet this deadline. On September 17, 1991, the South Carolina Department of Health and Environmental Control (DHEC) granted the facility's request for a minor permit modification to extend that deadline to November 15, 1991, but, by that time, the deadline had already been violated.

5. The notice letter also alleged that defendant likely committed monitoring and reporting violations (Pl. Ex. 170, p. 1):

[Y]our company has violated and continues to violate "an effluent standard or limitation" under Section 505(a)(1)(A) of the Act, 33 U.S.C. 1365(a)(1)(A), by failing to comply with NPDES permit number SC0034541 for its facility in Gaston, Lexington County, South Carolina, in at least the instances set forth in the attached chronological list of permit violations. In addition to the attached list of violations, there appear to be instances in which the facility has failed to comply with the monitoring and reporting requirements of the permit. However, the extent of these violations cannot be

determined from the information available. [emphasis added]

6. At the time that plaintiffs prepared their July 13, 1992, notice letter, defendants' permit had just imposed new stringent limits (the Phase II limits), effective June 1, 1992. Pl. Ex. 170, p. 2. Since defendant's permit did not require DMR's to be submitted until the 28th day of the following month (Pl. Ex. 107, Part I, p. 7, para. C(3)), defendant's first DMR under the new limits was not due to DHEC and EPA until July 28, 1992. Thus, at the time that plaintiffs prepared their notice of intent to sue, they did not have a DMR on which defendants had yet reported violations of the Phase II limits.

7. Based on the information from documents in defendant's public DHEC file, plaintiffs' notice letter stated (Pl. Ex. 170, p. 2):

The permit's imposition of Phase II discharge limitations, effective June 1, 1992, represents a recognition that the facility should have made modifications to its facility to meet the new limits prior to that time. These discharge limitations are greatly strengthened for a number of parameters. By applying the Phase II limits to the values for the same parameters reported on past DMRs for the period between January 1991 and April 1992, we have determined that the facility is not in compliance with the Phase II limits now in effect because (1) the facility's discharges have consistently exceeded the

Phase II limits and (2) the facility has not yet implemented remedial measures which would lower the pollution levels in its discharges. Thus, in June 1992, the facility will have violated its permit limits at least as to pH, copper, PCBs, and mercury.

8. The notice letter explained why plaintiffs believed that a citizen suit was necessary in these circumstances (Pl. Ex. 170, p. 2):

[T]he facility's history of noncompliance with requirements that it undertake remedial efforts indicates that there is a strong possibility that the facility will not comply with even a new schedule of compliance in its permit. We have therefore concluded that judicial action is necessary to ensure that the facility takes the necessary steps to comply with its permit.

9. A 1994 study which was presented by the Defendant confirms the presence of toxic pollutants downstream of defendant's facility, it shows further degradation of the fish and sediments in the area studied. For example, although in 1993 mercury was found only in the bass samples (Def. Ex. 37, p. 17), in 1994, mercury was present in all fish samples and in concentrations as much as three times as high as in 1993 (Def. Ex. 42, pp. 2, 18-19). Cadmium was not detected in any fish tissue samples in 1993, but was detected in samples in 1994 (Def. Ex. 42, pp. 18, 19). Similarly,

in 1994, copper was detected in all samples, as opposed to half of the 1993 samples and at concentrations nearly twice as high as in 1993. Def. Ex. 37, p. 17; Def. Ex. 42, pp. 19. The concentration of lead in the fish tissues also increased by 69% in 1994. Def. Ex. 37, p. 17; Def. Ex. 42, p. 19. PCB's continued to be detected in nearly all fish tissue samples. *Id.*, p. 18. Thus, the 1994 study shows that the concentrations of toxic pollutants downstream from defendant's facility increased since 1993. In addition, there was a reduction in the number of macroinvertebrate specimens at the Lake Watson sampling locations from 1993 to 1994. *Id.*, p. 10.

10. Comparison of pollutants in the stream sediments downstream from defendant's facility with sediments at the control station used in the study shows that, in 1993, there was 63% more copper in the downstream sediments than in the control station sediments. Def. Ex. 37, p. 18. Similarly, in 1994, the sediments from the downstream station contained more than twice as much copper and 73% more lead than those collected at the control station. Def. Ex. 42, p. 20. This evidence supports a finding that the

pollutants identified in defendant's studies entered the water through defendant's effluent.

C.

DEFENDANT'S NPDES PERMITS

11. On February 3, 1984, pursuant to Section 402 of the Act, 33 U.S.C. 1342, DHEC^{5/} issued NPDES permit number SC0034541 (hereafter "1984 permit"), effective March 1, 1984, for the facility at issue in this case. Pl. Ex. 104. The permit authorized the discharge of limited quantities of pollutants into the Boggy Branch of Bull Swamp Creek through Outfall^{6/} 001, set discharge limitations and monitoring requirements for several pollutant parameters^{7/} and required monitoring on a monthly basis and reporting the monitoring results on a quarterly basis. *Id.*, Part I, pp. 1, 4.

5. On June 10, 1975, EPA delegated responsibility to DHEC for administering the NPDES program in South Carolina. See 57 Fed. Reg. 43734 (September 22, 1992).

6. "Outfall" is the term used for a discharge point.

7. A "parameter" is any pollutant (e.g., copper, zinc) or any water quality indicator (e.g., biochemical oxygen demand, total suspended solids, pH) for which the permit contains one or more discharge limitations.

12. On February 13, 1991, DHEC issued a renewal NPDES permit to defendant, effective March 1, 1991 (hereafter "1991 permit"). PI. Ex. 107. The 1991 permit expired on May 31, 1994. *Id.*, p. 1. DHEC issued a new permit that was to become effective on November 1, 1994. PI. Ex. 400, cover page. However, as a result of defendant's challenge to the permit, it did not take effect until June 1997. Argument Tr., pp. 26, 30. The 1991 permit remained in effect until the effective date of the renewal. See 40 C.F.R. 122.6; S.C. Code Ann. 1-23-370.

13. Defendant purchased the facility subject to NPDES Permit No. SC0034541 in September 1990. Edmonds Testimony, Trial Tr. IV, p. 155.

14. Defendant's 1991 permit was issued in draft form on April 5, 1989. PI. Ex. 105. The draft permit contained Phase I and Phase II limitations (*id.*, pp. 00 0009-00 0010) and a schedule of compliance (*id.*, p. 00 0013).

15. At the time of the purchase, defendant was aware of the draft permit and knew that the wastewater treatment plant would have to be upgraded to meet the Phase II limitations in the draft

NPDES permit. Pl. Ex. 24, pp. 05 1023-05 1024; Dicks Rule 30(b)(6) Testimony, Trial Tr. III, pp. 9-10.

16. Shortly after the purchase of the facility, defendant confirmed that the existing wastewater treatment plant was inadequate through statistical analyses and bench scale studies. Dicks Rule 30(b)(6) Testimony, Trial Tr. III, pp. 35-36.

17. By letter dated October 22, 1990 (Pl. Ex. 106), defendant agreed to be bound by the terms and conditions of the draft permit (Pl. Ex. 105).

18. Defendant's 1991 permit, like the 1984 permit, limited its discharge of pollutants through Outfall 001. The 1991 permit set initial Phase I discharge limitations, effective from March 1, 1991, to May 31, 1992, and Phase II discharge limitations, effective from June 1, 1992, to the expiration date of the permit. Pl. Ex. 107, Part I, p. 2, para. A(1); *id.*, Part I, p. 3, para. A(1).

19. The Phase II limitations were significantly more stringent than the Phase I limitations. Phase II imposed biochemical oxygen demand (hereafter "BOD") limitations where there had been none before; decreased the permitted daily maximum discharge of

cadmium by 58.33%; decreased the permitted monthly average discharge of copper by 91.67%; decreased the permitted daily maximum discharge of copper by 93.25%; decreased the permitted daily maximum discharge of lead by 91.67%; decreased the permitted monthly average discharge of zinc by 75.33%; decreased the permitted daily maximum discharge of zinc by 86.50%; and changed the permitted daily maximum for pH from 9.0 to 8.0. Pl. Ex. 107, Part I, pp. 2-3, paras. A(1).

20. Plaintiff's expert, Dr. Bruce A. Bell, testified that defendant's discharge limitations for cadmium, copper, lead, zinc, mercury, polychlorinated biphenols (hereafter "PCB's") and pH are water-quality-based limitations. Bell Testimony, Trial Tr. II, p. 31. Water-quality-based discharge limitations are limitations based on water-quality standards adopted by each state. Trial Tr. I, p. 125. See also Pl. Exs. 123-124 (Excerpts, EPA Quality Criteria for Water (1976, 1986). Water-quality-based discharge limitations are established based on a determination that a given parameter may be discharged up to the amount of the water-quality-based limitation without violating the water-quality standards established

for the receiving water. Bell Testimony, Trial Tr. I, p. 125.

Therefore, the "violation of a water quality based standard would result in a violation of [the] water quality standard in the receiving water and presumably some environmental harm with it." *Id.*, p. 126.

21. DHEC employee, Melvin James, similarly testified (James Testimony, Trial Tr. IV, p. 55):

Q: And it's also assumed, is it not, that if you do not meet those water quality limits, you may be interfering with the designated uses of those waterways?

A: That's correct.

Q: And therefore if a designated use is swimming and you don't meet those limits, you may very well be interfering with the safety of swimming in those waterways?

A: That's correct.

22. Defendant's 1991 permit also stated (Pl. Ex. 107, Part III, pp. 20-21, para. A(8)):

#18
[Handwritten signature]

The limitation developed for Copper, Lead, Cadmium, Mercury and Polychlorinated Biphenyls, based on EPA Water Quality Criteria is

Pollutant Parameter	Daily Maximum Discharge Limitation
Copper	10 ug/l
Lead	3.2 ug/l
Cadmium	1.65 ug/l
Mercury	0.024 ug/l
Polychlorinated Biphenyls	<0.014 ug/l

However, the analytical detection level for these parameters are reflected in the limits pages. The permittee must analyze to the lowest detection limit of a South Carolina certified laboratory. If the analytical capabilities improve, the new detection level must be met or down to the above referenced water quality limitation.

23. The first phase of the 1994 permit, which was to last until April 30, 1995, retained the Phase II limitations of the 1991 permit, except that it reduced the limitations for total suspended solids (hereafter "TSS"), cadmium, lead, and nickel and eliminated the limitations for mercury and PCB's. PI. Ex. 400, Part I, p. 2, para. A(1). The second phase of the 1994 permit, which was to go into effect on May 1, 1995, retained the first phase limitations, except that it tightened the iron limitation. *Id.*, Part I, p. 3, para. A(3). Until April 30, 1996, defendant was required only to monitor and report its

toxicity tests but, as of May 1, 1996, was required to pass these tests. *Id.*, Part I, pages 4-5, paras. A(5). *See also id.*, Part III, p. 19, para. 7(d). After a legal challenge to the permit by defendant, the permit became final on November 1, 1996, but the deadline for compliance with the toxicity limitation was extended by DHEC from April 30, 1996, to April 30, 1998.

24. Defendant's 1984, 1991 and 1994 permits also provided (Pl. Ex. 104, Part II, p. 7, para. A(1); Pl. Ex. 107, Part II, p. 13, para. B(1); Pl. Ex. 400, Part II, p. 13, para. B(1)):

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

25. Defendant's 1991 and 1994 permits further provided (Pl. Ex. 107, Part II, p. 11, para. A(1)):

The permittee must comply with all conditions of this permit. Any permit non-compliance constitutes a violation of the [Federal Water Pollution Control] Act and the S.C. Pollution Control Act and is grounds for enforcement action * * *.

26. The 1991 permit also contains a Schedule of Compliance that states (Pl. Ex. 107, Part I, p. 6, para. B(1)):

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

March 31, 1991 - Permittee shall submit a PER for DHEC review and approval to meet Phase II limitations.

September 1, 1991 - Permittee shall submit Final Plans and Specifications for Phase II modifications.

June 1, 1992 - Permittee shall be in compliance with Phase II limitations.

27. The 1991 permit set forth procedures for modification of the permit (Pl. Ex. 107, Part II, p. 11, para. A(4)(b)):

Upon sufficient cause, this permit may be modified, revoked, re-issued, or terminated during its term, after public notice and opportunity for hearing. Modifications deemed to be minor will not require public notice.

The permit further stated (*id.*, Part II, p. 12, para. A(4)(c)): "The filing of a request by the permittee for a permit modification * * * does not stay any permit condition."

28. The 1991 permit also stated (Pl. Ex. 107, Part II, p. 11, para. A(2)(d)):

It is the responsibility of the permittee to have a treatment facility that will meet the final effluent limitations of this permit. The approval of plans and specifications by the Department does not relieve the permittee of responsibility for compliance.

D.

THE DEFENDANT'S VIOLATIONS OF ITS NPDES PERMITS

29. The Court finds that the Defendant has exceeded the discharge limitations of its permit for 91 days (30 maximum violations and 2 monthly average violations), the monitoring requirements 396 times, and the reporting requirements 323 times and has failed to meet the Schedule of Compliance for the upgrade of its wastewater treatment plant on 54 days.

30. The Court concludes that the Defendant is not liable for discharge violations based on Part III, paragraph A(8) of its permit.

31. The Defendant is not liable for exceedances of the Phase II limitations of its permit prior to April 2, 1993.

32. The Court concludes that Part III, paragraph A(8) of the Defendant's permit sets forth monitoring requirements only and the Defendant is liable for 81 violations of the monitoring requirements

set forth therein through February 1995 and 79 violations through March 1997. Findings of Fact 78, 122.

33. The Defendant is not liable for failure to report exceedances of Part III, paragraph A(8) of its permit.

34. The Defendant is not liable for failure to report exceedances of Phase II limitations prior to April 2, 1993.

35. The Defendant's total number of violations from October 1990 through April 1997, which is the last month for which plaintiffs had the Defendant's DMR's, is 61 days of discharge violations, 396 monitoring violations, 323 reporting violations, and 54 Schedule of Compliance violations, *i.e.*, a total of 864 violations.

36.. The Court finds that the Defendant committed 864 days of violation of its NPDES permit, as follows:


<u>Violation Type</u>	<u>Number of Days</u>
Discharge (Pl. Ex. 205; Pl. Ex. 500)	91
Monitoring (Pl. Ex. 177; Pl. Ex. 502)	396
Reporting (Pl. Ex. 178; Pl. Ex. 178)	323
Compliance Schedule (Conclusions of Law 100-102)	<u>54</u>
Total Days of Violation:	864

37. The Court finds that the Defendant gained no economic benefit because it upgraded its wastewater treatment facility prior to April 2, 1993.

Violations of the Phase I Limitations of the 1991 Permit

38. The Defendant exceeded the Phase I discharge limitations set forth in its 1991 permit 16 times during the period from March 1991 through March 1993. Pl. Ex. 175, Nos. 23, 94, 147, 153, 189, 191, 206, 270, 359, 380, 382, 479, 482, 492, 494, 495.^{8/} The Defendant admitted that it exceeded its permit limitation in three of these instances. *Id.*, Nos. 23, 380, 479; Edmonds Testimony, Trial Tr. V, p. 18.

39. Nine of the remaining exceedances of the Phase I discharge limitations are of the limitation for pH. Pl. Ex. 175, Nos. 94, 147, 153, 189, 191, 206, 270, 359, 382. The Defendant has presented no valid evidence that these violations did not occur.



8. Twelve of these exceedances are also exceedances of the Phase II limitations of the Defendant's 1991 permit that occurred during the period from June 1, 1992, through March 31, 1993. Pl. Ex. 175, Nos. 189, 191, 206, 270, 359, 390, 382, 479, 482, 492, 494, 495. See Finding of Fact 67.

40. The remaining four exceedances of the Phase I discharge limitations, which were of the limitations for iron and zinc, took place in March 1993. Pl. Ex. 175, Nos. 482, 492, 494, 495. The Defendant did not present any evidence that it did not exceed the discharge limitation for these parameters on these occasions.

Violations of the Phase II Discharge Limitations of the 1991 Permit after April 2, 1993

41. The Defendant exceeded the Phase II discharge limitations nine times after April 2, 1993. Pl. Ex. 175, Nos. 507-509, 515-517, 527-529.^{9/} The Defendant admitted having exceeded its discharge limitation with respect to one of these instances. *Id.*, No. 517; Edmonds Testimony, Trial Tr. V, p. 18. The Defendant did not present any evidence that it did not exceed its Phase II discharge limitations with respect to the remaining eight violations of the Phase II limitations after April 2, 1993.

9. Two of these exceedances are also exceedances of other water-quality limitations in Part III, paragraph A(8). Pl. Ex. 175, Nos. 515, 516. See Finding of Fact 66.

Violations of the Water-Quality-Based Discharge Limitations in Part III, Paragraph A(8) of the 1991 Permit

42. On the basis of the Defendant's own laboratory reports (Pl. Ex. 186) and the testimony of plaintiffs' expert (Bell Testimony, Trial Tr. II, pp. 13-14, 17-18; Pl. Ex. 168, pp. 1-2), the Court finds that the lowest analytical detection level consistently achievable by the laboratories used by the Defendant to test for cadmium, copper and lead for the periods indicated were as follows (in mg/l):


	3/91-8/91	9/91-8/93	9/93-8/94	9/94-2/95
Cadmium	0.010	0.006	0.003	0.002
Copper	0.010	0.010	0.010	0.010
Lead	0.060	0.032	0.029	0.028

43. The Defendant's discharge contained amounts of cadmium, copper and lead greater than the amounts listed in the table in Finding of Fact 251 times. Pl. Ex. 175, Nos. 12-22, 24-93, 95-118, 120-146, 148-152, 157, 162, 166, 167, 171, 175, 177, 181, 185, 190, 193, 195, 201, 203, 207, 208, 212, 220, 221, 225, 227, 228, 234, 239, 243-245, 247, 253, 258, 259, 265, 267, 273, 276, 277, 283, 284, 287, 288, 294, 297, 303, 304, 307, 312, 314, 315, 320, 321, 324,

326, 329, 330, 332, 335, 344, 348, 353, 357, 362, 366, 369, 375, 376,
381, 384, 390, 393, 399, 402, 409, 412, 418, 423, 426, 428, 433, 437,
442, 446, 447, 452, 456, 462, 477, 479, 480, 483, 485, 491, 496, 497,
510-516, 518-526, 528, 530-535.^{10/}

Violations of the Phase II Limitations of the 1991 Permit from June 1, 1992, through March 31, 1993

44. The Court finds that the Defendant exceeded the Phase II discharge limitations 331 times during the period from June 1, 1992, through March 31, 1993. Pl. Ex. 175, Nos. 151-156, 158-166, 168-170, 172-174, 176, 178-180, 182-184, 186-206, 208-219, 221-242, 245, 246, 248-252, 254-258, 260-275, 277-296, 298-302, 305-313, 315-331, 333-374, 376-411, 413-432, 434-436, 438-461, 463-506. The Defendant did not present any evidence that it did not exceed the Phase II discharge limitations on these occasions.


10. Seventy-one of these exceedances are also exceedances of the Phase II limitations of defendant's 1991 permit that occurred during the period from June 1, 1992, through April 1, 1993. Pl. Ex. 175, Nos. 151, 152, 162, 166, 190, 193, 195, 201, 203, 208, 212, 221, 225, 227, 228, 234, 239, 245, 258, 265, 267, 273, 277, 283, 284, 287, 288, 294, 307, 312, 315, 320, 321, 324, 326, 329, 330, 335, 344, 348, 353, 357, 362, 366, 369, 376, 381, 384, 390, 393, 399, 402, 409, 418, 423, 426, 428, 442, 446, 447, 452, 456, 477, 479, 480, 483, 485, 491, 496, 497, 528.


DEFENDANT'S MONITORING VIOLATIONS

45. The Defendant did not monitor as required by its permits 317 times.^{11/} Pl. Ex. 177. The Defendant admitted having violated its monitoring requirements eight times. Pl. Ex. 177, Nos. 20 (2 violations), 21, 25, 26 (2 violations), 163, 249; Edmonds Testimony, Trial Tr. V, pp. 83, 86-88.

46. Monitoring violations were identified by analyzing the Defendants' laboratory reports and associated chain of custody documents (Pl. Ex. 186), the Defendant's wastewater treatment logs (Pl. Ex. 187) and defendant's DMR's (Pl. Ex. 185). Bell Testimony, Trial Tr. II, p. 9. Laboratory documents and wastewater facility logs are not submitted to the regulatory agencies on a regular basis. *Id.*, p. 21.


Violations of the Required Monitoring Frequency

47. The Court finds that the Defendant failed to monitor the number of times required by its NPDES permits 201 times.


^{11/} At trial, plaintiffs alleged 270 instances of noncompliance, totalling 329 monitoring violations. Pl. Ex. 177. Based on evidence presented by defendant at trial, plaintiffs have withdrawn their allegations of violation numbers 19, 196, 261, 274 and 275 on Plaintiffs' Exhibit 177.

48. The Defendant's permits required that it monitor for each parameter twice a week. Pl. Ex. 104, Part I, p. 2; Pl. Ex. 107, Part I, pp. 2-3, paras. A(1). In addition, the permits required that the samples and measurements used in defendant's monitoring be "representative of the volume and nature of the monitored discharge." Pl. Ex. 104, Part I, p. 4, para. C(1); Pl. Ex. 107, Part I, p. 7, para. C(1).

49. The Defendant's permits required that, for oil and grease, defendant's monitoring be by grab sample. Pl. Ex. 104, Part I, p. 2, para. A; Pl. Ex. 107, Part I, paras. pp. 2-3, paras. A(1). In 25 instances, the Defendant failed to take two grab samples for oil and grease in weeks in which Erone Edmonds, defendant's Head of Water and Wastewater Treatment, testified that defendant discharged wastewater on at least two days. Pl. Ex. 177, Nos. 1, 4, 8, 17, 36, 59, 70 (two violations), 81, 131 (two violations), 157, 163, 176 (two violations), 214, 225, 236 (two violations), 247, 248, 249, 258, 265 (two violations); Trial Tr. V, pp. 23-26, 28, 30-32, 33-44, 65-66, 75-76.



50. The Defendant's permits required that it use composite samples to monitor for BOD, TSS, iron, cadmium, copper, lead, mercury, nickel, zinc and PCB's. Pl. Ex. 104, Part I, p. 2, para. A; Pl. Ex. 107, Part I, pp. 2-3, paras. A(1). The Defendant's permits provided that "[t]he length of the composite sample shall equal the number of hours the treatment plant is in operation, i.e. 8, 16 or 24 hours." Pl. Ex. 104, Part I, p. 2, para. A; Pl. Ex. 107, Part I, pp. 2-3.

51. In 145 instances, the Defendant failed to take two composite samples in weeks in which Mr. Edmonds testified that defendant discharged at least twice for at least eight hours each time.^{12/} Pl. Ex. 177, Nos. 2, 3, 5-7, 9-16, 18, 20 (two violations), 21, 25-27, 28, 38, 49-58, 60, 61, 62-69 (two violations each), 71-72 (two violations each), 73-80, 82, 83, 123-130, 132-133 (two violations each), 149-156, 204-211, 213, 215-224, 226-235 (two violations each), 237-246, 263- 264 (two violations each), 266-273; Edmonds

12. Thirty-four of these omissions (Pl. Ex. 177, Nos. 3, 63-66, 68-69, 123-130, 227-230, 232, 233) arose because defendant took a grab sample for these parameters instead of the composite sample type required by its permit. See Pl. Ex. 107, Part I, pp. 2-3, paras. A(1).

Testimony, Trial Tr. V, pp. 24-26, 29-37, 40-41, 43-44, 65-66, 72-74, 78.

52. The Defendant also failed 30 times to take two composite samples a week in weeks during which it discharged on at least two days, but only one of the discharges exceeded eight hours. Pl. Ex. 177, Nos. 168-175 (two violations each), 177-178, 250-257, 259-260 (two violations each); Edmonds Testimony, Trial Tr. V, pp. 38-39, 43, 66-72, 75-76.

Violations for Failure to Test to the Level Required

53. In 97 instances, the Defendant monitored its discharge for PCB's, copper or lead, but did not test for the amount of those parameters required by its 1991 permit.

54. The PCB discharge limitation set by the Defendant's 1991 permit was a daily maximum of less than 0.5 ug/l. Pl. Ex. 107, Part I, pp. 2-3, paras. A(1). This limitation was the same for both Phase I and Phase II (*ibid.*) and is therefore unaffected by the permit modification. The Defendant failed to measure whether the PCB's in the discharge were less than 0.5 ug/l on 16 occasions, but instead only determined whether the amount of PCB's in the

discharge was at a level greater than 0.5 ug/l. Pl. Ex. 177, Nos. 23-24 (two violations each), 26, 29-31 (two violations each), 33, 35 (two violations), 40 (two violations). The Defendant did not present any evidence that it actually tested to 0.5 ug/l on these occasions or that it was prevented from doing so for any reason.

55. The Defendant's laboratory reports show that the Defendant's laboratories were capable on a consistent basis of analyzing cadmium, copper and lead to the levels indicated in the table in Finding of Fact 64. The Defendant did not analyze to these levels 81 times. Pl. Ex. 177, Nos. 87-93, 95-122, 134-141, 143-148, 158-162, 164-167, 179-184, 186-195, 197-202, 262. The Defendant did not present any evidence that its laboratories actually tested to these levels or that the laboratories were prevented from doing so for any reason.

Violations for Exceedance of Maximum Holding Times

56. The Defendant's 1991 permit required that defendant's test procedures conform to federal regulations that set guidelines for the analysis of pollutants. Pl. Ex. 107, Part I, para. C(4), p. 7. These regulations, 40 C.F.R. 136.3(e), Table II, set forth the

maximum amount of time that a sample can be held prior to analysis. The Defendant exceeded the maximum holding time for its BOD samples 12 times (Pl. Ex. 177, Nos. 42-45, 47-48, 84-86, 94, 142, 185) and exceeded the maximum holding time for its PCB samples 2 times (*id.*, Nos. 22, 203). The Defendant did not present any evidence contrary to this finding.

Violations of Requirement to Monitor on the Second Wednesday of Every Month

57. The Defendant's 1991 permit provided (Pl. Ex. 107, Part III, p. 21, para. A(9)):

The permittee shall monitor all parameters consistent with conditions established by the permit on the 2nd Wednesday of every calendar month, unless otherwise approved by [DHEC]. Additional monitoring, as necessary to meet the frequency requirements of this permit * * * shall be performed by the permittee.

Dr. Bell explained that NPDES permits frequently include a requirement that the permittee monitor on a given day of the week to ensure that "the sampling is in some way independent of how well the treatment plant is operating." Bell Dep. Tr., p. 10. This provision accomplishes this purpose by taking "the monitoring time

out of the permittee's discretion and mak[ing] it independent of how the permittee thinks the plant is doing that day." *Id.*, pp. 10-11.

58. The Defendant's operating logs (Def. Ex. 3) demonstrate that defendant discharged wastewater on the second Wednesday of the month in 45 of the 49 months from March 1991 through March 1995, which is the last month for which defendant produced such information. The Defendant's laboratory reports (Pl. Ex. 186) demonstrate that defendant only monitored on the second Wednesday of the month 13 times in those 45 months. The last month in which the Defendant monitored on the second Wednesday of the month was in June 1993. Pl. Ex. 186, p. 02 00282. Therefore, the Court finds that defendant did not comply with this monitoring requirement 32 times. The Defendant presented no contrary evidence.

Miscellaneous Monitoring Failures to Comply with Monitoring Requirements

59. On four occasions, totaling five violations, the Defendant failed to monitor for BOD and PCB's as required by its permit for miscellaneous reasons, such as failing to follow the test procedures

(Pl. Ex. 177, No. 42) and failing to monitor correctly because of improperly calibrated equipment (*id.*, No. 27, No. 46 (two violations); *id.*, No. 212).


THE DEFENDANT'S REPORTING VIOLATIONS

60. The Defendant did not report as required by its permit 787 times. Pl. Ex. 176 and 178.

Violations for Failure to Report Violations of Discharge Limitations

61. The Court finds that the Defendant did not report 477 exceedances of the discharge limitations set forth in its NPDES permits.^{13/} The Defendant did not present any evidence that it reported these exceedances.

62. The Defendant did not report 11 exceedances of the Phase 1 discharge limitations of its 1991 permit during the period



13. At trial, the Plaintiffs alleged 479 violations. Pl. Ex. 176. Based on evidence presented by the Defendants at trial, the Plaintiffs have withdrawn their allegations of violation numbers 1 and 109 on Plaintiffs' Exhibit 176.

from March 1991 to March 1993. *See Findings of Fact 60-62^{14/}; Pl. Ex. 176, Nos. 14, 84, 137, 142, 176, 177, 194, 250, 331, 352, 354.*

63. The Defendant did not report one exceedance of the Phase II discharge limitations of its 1991 permit after April 2, 1993. *See Findings of Fact 63; Pl. Ex. 176, No. 459.*

64. The Defendant did not report 225 exceedances of the water-quality-based discharge limitations for cadmium, copper and lead set forth in Part III, paragraph A(8) of its 1991 permit. *See Findings of Fact 66;^{15/} Pl. Ex. 176, Nos. 2-13, 15-83, 85-108, 110-136, 138-141, 145, 151, 154, 160, 162, 164, 169, 171, 181, 187-188, 192-193, 198, 207, 208, 215, 223, 224, 228, 234, 237, 239, 245, 247, 251, 256, 257, 261, 265, 267, 273, 275, 282, 283, 285, 290-291, 293, 299,*

14. Eight of these exceedances are also exceedances of the Phase II limitations of defendant's 1991 permit which occurred during the period of June 1992 - March 1993. Pl. Ex. 176, Nos. 142, 176-177, 194, 250, 331, 352, 354. They are counted only once in reaching the sub-total of 477 reporting violations described in Finding of Fact 87.

15. Forty-five of these failures to report exceedances of the discharge limitations set forth in Part III, paragraph A(8) are also failures to report exceedances of the Phase II limitations of defendant's 1991 permit that occurred during the period from June 1, 1992, through April 1, 1993. We have counted them only once in reaching the sub-total of 477 reporting violations described in Findings of Fact No. 87. *See Pl. Ex. 176, Nos. 141, 151, 181, 187, 188, 192, 198, 207, 215, 239, 245, 247, 251, 256, 261, 265, 267, 273, 285, 290, 293, 299, 300, 309, 316, 321, 326, 330, 333, 338, 346, 353, 360, 364, 370, 373, 387, 393, 408, 417, 421, 439, 441, 447, 449.*

300, 304, 309, 316, 321, 326, 330, 333, 338, 346, 347, 353, 360, 364, 370, 373, 381, 387, 393, 399, 404, 408, 417, 421, 425, 439, 441, 447, 449, 460-479.

65. The Defendant did not report 282 exceedances of the Phase II discharge limitations that occurred from June 1, 1992, through March 13, 1993, the period during which defendant was awaiting the outcome of the permit modification proceedings. *See* Finding of Fact 112, 121; Pl. Ex. 176, Nos. 141-143, 144, 146-153, 155-159, 161, 163, 165-168, 170, 172-192, 194-207, 209-222, 225-227, 229-233, 235, 236, 238-256, 258-274, 276-281, 284-290, 292-303, 305-331, 332-346, 348-380, 382-398, 400-403, 405-424, 426-447. Defendant also did not report its exceedances of these limitations 11 times during the period from March 13, 1993, through March 31, 1993. Pl. Ex. 176, Nos. 448-458.

Violations for Failure to Report Monitoring Violations

66. The Court finds that the Defendant did not report 310 violations of the monitoring requirements of its permits during the

period from October 1990 through February 1995.^{16/} Pl. Ex. 178.

The Defendant did not present any evidence that it reported these instances in which it failed to comply with its monitoring requirements.

67. The Defendant did not report its failure to monitor for oil and grease twice a week (see Finding of Fact 72) 24 times. Pl. Ex. 178, Nos. 2, 7, 12, 32, 55, 66 (two violations), 77, 121 (two violations), 150, 161, 167 (two violations), 203, 211, 229 (two violations), 239, 244, 245, 252, 259 (two violations).

68. The Defendant did not report its failure to take and analyze two composite samples a week in weeks in which it discharged at least twice and for at least eight hours each time (see Findings of Fact 74) 144 times. Pl. Ex. 178, Nos. 1, 3-6, 8-11, 13-17, 19, 20 (two violations), 21, 23, 24, 34, 45-54, 56, 57, 58-65 (two violations each), 67-68 (two violations each), 69-76, 78, 79, 117-120, 122-123 (two violations each), 124-127, 144-149, 151, 152, 195-197, 199-202, 204- 206, 212-221, 222-228 (two violations each),

16. At trial, plaintiffs alleged 315 violations. Pl. Ex. 178. Based on evidence presented by defendant at trial, plaintiffs have withdrawn their allegations of violation numbers 18, 186, 257, 270, and 271 on Plaintiffs' Exhibit 178.

230-232 (two violations each), 233-238, 240-243, 258 (two violations), 260-263, 264 (two violations), 265-268.

69. The Defendant did not report its failure to take and analyze two composite samples a week in weeks in which it discharged on at least two days but in which it discharged for more than eight hours on no more than one day (*see* Finding of Fact 75) 30 times. Pl. Ex. 178, Nos. 162 (two violations), 163, 164-166 (two violations each), 168, 169-172 (two violations each), 246, 247 (two violations), 248-251, 253, 254 (two violations), 255, 256.

70. The Defendant did not report its failure to test for PCB's to at least 0.5 ug/l (*see* Finding of Fact 77) 13 times. Pl. Ex. 178, No. 29, and two violations each for Nos. 22, 25-27, 30, 35.

71. The Defendant did not report its failure to test to the limits established by Part III, paragraph A(8) for copper and lead (*see* Finding of Fact 78) 81 times. Pl. Ex. 178, Nos. 83-85, 87-116, 128-134, 136-143, 153-160, 173-176, 178-185, 187-194, 207-210, 269.

72. The Defendant did not report its exceedances of the maximum holding times for BOD and PCB samples (*see* Finding of

Fact 79) 14 times. Pl. Ex. 178, Nos. 21, 38-41, 43, 44, 80-82, 86, 135, 177, 206.

73. The Defendant also failed to report its violations of its monitoring requirements with respect to two violations that were the result of inadequate monitoring equipment (Pl. Ex. 178, No. 42 (two violations)) and to two violations that were due to failure to follow the required procedures for preparing the test samples (*id.*, Nos. 38, 198).

THE DEFENDANT'S VIOLATIONS OF THE SCHEDULE OF COMPLIANCE

74. The Court finds that defendant failed to meet the Schedule of Compliance in its 1991 permit for 54 days.

75. The Defendant's 1991 permit required defendant to submit final plans and specifications to meet the Phase II limitations by September 1, 1991. The Defendant failed to meet this deadline. Stipulations, July 17, 1995, No. 10.

76. On August 30, 1991, the Defendant's engineering consultant, Thomas Thain of B.P. Barber & Associates, Inc., wrote to DHEC requesting a two-and-one-half month extension of the

September 1, 1991, deadline for submission of final plans and specifications to November 15, 1991. Pl. Ex. 29. Mr. Thain's letter states: "With this delay in submittal of final plans, there will still be adequate time to install equipment and meet the June 1, 1992 compliance deadline schedule." *Ibid.*

77. Mr. Thain wrote the August 30, 1991, letter on his firm's letterhead at the Defendant's request. Pl. Ex. 29. "This letter was written on behalf of Gaston Copper and I was not the permit holder. I was simply conveying to them Gaston Copper's intentions." Thain Testimony, Trial Tr. III, p. 113. Mr. Thain and his firm had no role in deciding what the Defendant needed to do in order to meet the compliance schedule in its NPDES permit. *Id.*, p. 108. The statement in the August 30, 1991, letter that the June 1, 1992, deadline would still be met involved a time estimate for installation and prove-in of the wastewater treatment plant upgrade. *Id.*, p. 112.

78. Terry Steinert, the Defendant's environmental manager at the time the letters were written, thought that because the letters went out on the letterhead of B.P. Barber & Associates, Inc., under the signature of Thomas Thain, Mr. Thain and B.P. Barber had

something to do with setting the construction schedule upon which the promise to meet the June 1, 1992, deadline was based. Steinert Testimony, Trial Tr. IV, pp. 3-4.

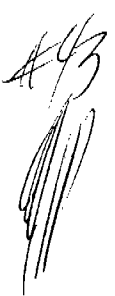
79. When DHEC wrote back to the Defendant on September 17, 1991, to accept the Defendant's request to modify its permit to allow a two-and-one-half month extension for the submission of final plans and specifications until November 15, 1991, it relied on the Defendant's representation that the extension would not affect the June 1, 1992, compliance date. DHEC stated: "Because the final compliance date remains unchanged this constitutes a minor change to the NPDES permit and does not require a public notice." Pl. Ex. 112.

80. Mr. Thain wrote to DHEC on October 31, 1991, on his firm's letterhead, requesting a second extension for the Defendant's submission of final plans and specifications. Pl. Ex. 31. Mr. Thain's October 31, 1991, letter requested an extension to December 15, 1991, and again stated: "the time required for the additional pilot test work is not anticipated to effect the June 1, 1992 compliance deadline." *Ibid.* However, during his testimony, Mr. Thain admitted

that in order to meet the June 1, 1992, deadline, when final plans and specifications were not being submitted until December 15, 1991, "would have been a super human effort." Thain Testimony, Trial Tr. III, p. 115.

81. The Defendant's statement to DHEC that the submission of final plans and specifications on December 15, 1991, would not affect the June 1, 1992, compliance deadline was based on a three-month construction schedule for the wastewater treatment plant upgrade. Pl. Ex. 32. However, the Defendant admits that the three-month construction schedule "was arbitrary. * * * [T]hey pulled three months out of the air. It was just a number, it had no basis." Dicks Rule 30(b)(6) Testimony, Trial Tr. III, p. 46.

82. DHEC wrote to the Defendant on November 8, 1991, stating that it was granting an extension for submission of the final plans until December 16, 1991. Pl. Ex. 113. The letter did not modify the Defendant's permit. Once again, DHEC relied on the Defendant's promise to meet the June 1, 1992, compliance deadline: "We understand that this delay will not affect the June 1, 1992 compliance deadline." *Ibid.*



83. The Defendant actually submitted its final plans and specifications under a cover letter dated December 23, 1991.

Stipulations, July 17, 1995, No. 10; Pl. Ex. 115.

84. In the opinion of the Defendant's engineering consultant, Mr. Thain, if the Defendant had met the September 1, 1991, deadline for submission of final plans and specifications, it would have been possible for the Defendant to have met the June 1, 1992, deadline for compliance. Thain Testimony, Trial Tr. III, p. 143.

85. In the opinion of Dr. Bell, whom the Court recognized as an expert in environmental engineering (Trial Tr. I, p. 118), the Defendant could have met the compliance schedule set forth in its 1991 permit (Pl. Ex. 107) for design and construction of its wastewater treatment plant upgrade. "My opinion is that it's not an unreasonable schedule to be able to select a process, design a treatment plant of that type, and get it built. So, I think the schedule is reasonable." Bell Testimony, Trial Tr. II, p. 47.

86. On March 24, 1992, the Defendant requested that DHEC grant it additional time beyond June 1, 1992, to come into compliance with the Phase II limitations. Pl. Ex. 42. The

Defendant stated that it needed "16 to 20 weeks" to construct a new wastewater treatment plant after DHEC approved its construction plans. *Ibid.*

87. On March 25, 1992, DHEC wrote to the Defendant (Pl. Ex. 126):

[Defendant] has previously been granted two (2) extensions on th[e] schedule for submission of Final Plans and Specifications. It is very likely that had [defendant] met the original schedule for submission of Final Plans and Specifications, this project could have been completed in a timely manner.

88. On April 7, 1992, the Defendant again asked for an extension of the June 1, 1992, compliance deadline. Pl. Ex. 45. It sought a one-year construction period for the same project it had earlier represented to DHEC could be completed in "16 to 20 weeks." *Ibid.*; Pl. Ex. 42; Thain Testimony, Trial Tr. III, p. 117.

89. Subsequent to the Defendant's request for a one-year construction schedule to DHEC, the Defendant developed a construction schedule that showed that construction and prove-in would actually only take 31 weeks. Pl. Ex. 49; Steinert Testimony, Trial Tr. IV, pp. 10-11. Terry Steinert, the Defendant's

environmental manager, never communicated to DHEC the fact that the needed time for construction had been reduced. *Id.*, p. 11.

90. On May 14, 1992, DHEC approved the final plans and specifications and granted the Defendant a State Construction Permit. Stipulations, July 17, 1995, No. 11; Pl. Ex. 171.

91. On June 3, 1992, the Defendant wrote to DHEC informing it that construction on the wastewater treatment plant upgrade had begun. Pl. Ex. 48. Construction did not begin until mid-July 1992. The Defendant admitted that "it was sometime in July when actual construction started, and there were not any preliminary activities there." Dicks Rule 30(b)(6) Testimony, Trial Tr. III, p. 48. Thus, contrary to its statements to DHEC, the Defendant did not begin constructing the wastewater treatment plant upgrade until approximately two months after the DHEC construction permit was received.

92. On June 15, 1992, DHEC issued Public Notice No. 92-261-M, which informed the public of the proposed extension of the deadline for the Defendant's compliance with Phase II limitations

until March 14, 1993. Stipulations, July 17, 1995, No. 13; Pl. Ex.

110.

**THE DEFENDANT'S VIOLATIONS SUBSEQUENT TO THE VIOLATIONS
AS TO WHICH EVIDENCE WAS SUBMITTED AT TRIAL**

93. Subsequent to the evidence of violations submitted by the Plaintiffs at trial and through April 1997,^{17/} the Defendant violated the discharge limitations in its permit 20 times. Pl. Ex. 500. Three of these violations were of the Phase II limitations in its 1991 permit for oil and grease. *Id.*, Nos. 18-20. Seventeen of the violations were of Part III, para. A(8) limitations for cadmium, copper and lead. *Id.*, Nos. 1-17. Subsequent to the evidence of violations at trial, the Defendant violated the monitoring requirements of its permit 79 times by failing to monitor its discharge to the level of detection that defendant's own laboratory had demonstrated could be achieved. Pl. Ex. 501. *See Finding of Fact 64-65.* Subsequent to the evidence violations at trial, the

17. Prior to the August 11, 1997 reargument of the case, the Defendant provided the Plaintiffs with their DMR's and laboratory reports through April 1997. The Plaintiffs submitted evidence to the Court concerning post-trial violations through April 1997 with "Plaintiffs' Motion to Reopen the Record for the Admission of Documentary Evidence and Exhibits," dated September 23, 1997, (Pl. Exs. 500-505 attached thereto).

Defendant violated the reporting requirements of its permit 16 times by failing to report violations of the discharge limitations on its DMR's, including 15 violations of Part I, paragraph A(8) and one violation of Phase II limitations. Pl. Ex. 502.

E.

THE DEFENDANT'S CLAIM OF SINGLE OPERATIONAL UPSET

94. The Defendant claims that certain events in March, April and October 1993 qualify as single operational upsets (hereafter "SOU's") that should limit its liability for violations that occurred during that period. Def. Supp. Proposed Findings 43-47.

The Defendant's Discharge Violations in March and April 1993

95. Mr. Edmonds testified that defendant experienced foaming problems during March and April 1993 because a chemical that the manufacturer of the upgraded treatment plant suggested that the Defendant use to prevent foaming in the treatment system did not work. Edmonds Testimony, Trial Tr. IV, p. 172. He stated that foam in the treatment plant contributes to violations of metals parameters. *Id.*, pp. 171-172. He testified that the foaming problem ceased as soon as the Defendant began to use the proper polymer.

Id., p. 173; *id.*, Trial Tr. V, p. 58. The Defendant did not present any testimony connecting the problem of foam with the Defendant's 13 pH violations during this period. *See* Pl. Ex. 175, Nos. 487-490, 498-506.


The Defendant's October 1993 Violations

96. The Defendant also claims that the SOU limitation applies to two violations that occurred on October 5, 1993. *See* Pl. Ex. 175, Nos. 515, 516. Mr. Edmonds testified that these violations occurred when the PVC "header" on the sand filters in defendant's treatment system broke. Edmonds Testimony, Trial Tr. IV, pp. 176-178. Mr. Edmonds testified that repairing the broken header was a "maintenance" problem (*id.*, Trial Tr. V, p. 56), that the Defendant replaced the header with one made of stainless steel (*id.*, Trial Tr. IV, 177-178) and that the Defendant has not subsequently had any problems with the part (*ibid.*).

97. Edmonds' recollection of the dates of these alleged SOU events is based on what is recorded in the operating logs. Edmonds Testimony, Trial Tr. V, p. 49. As Mr. Edmonds stated, the logs are "like an encyclopedia. You can go back through it and more or less pinpoint what happened and the

problems we had and what we did to correct the problems." *Ibid.*

98. The Defendant's operator's logs make no reference to when the header broke. Mr. Edmonds testified that when the header broke, the Defendant "shut the system down and repaired it." Edmonds Testimony, Trial Tr. IV, p. 177. The logs indicate that the Defendant was discharging wastewater from the treatment system on October 5 (Def. Ex. 3, pp. 02 00733 ("took system off of bypass and started discharging")), October 6 (*ibid.* ("composite sample started up")) and October 7 (*id.*, p. 02 00734 ("took system off of bypass")). Although the logs do not report that the header broke, they state that the Defendant installed sandfilter headers on October 8. *Id.*, pp. 03 00588-03 00589. Thus, the evidence indicates that the header broke either on October 5 or October 8. Because the Court concludes (Conclusions of Law 150-156) that the Defendant's SOU claim fails in either case, the Court does not need to determine when the header broke.



III.

CONCLUSIONS OF LAW

**1. Section 309(d) of the Water Act, 33 U.S.C. 1319(d),
provides:**

**Any person who violates sections 301, 302, 306, 307,
308, 318, or 405 of this Act, or any permit condition or
limitation implementing any of such sections in a permit
issued under section 402 of this Act by the Admin-
istrator, or by a State * * * shall be subject to a civil
penalty not to exceed \$25,000 per day for each violation.
[emphasis added]**

**2. The Supreme Court has concluded that (*Friends of the
Earth v. Laidlaw Environmental Services (TOC), Inc., supra*, 120 S.Ct.
at 706):**

**[C]ongress has found that civil penalties in Clean Water
Act cases do more than promote immediate compliance
by limiting the defendant's economic incentive to delay
its attainment of permit limits; they also deter future
violations. This congressional determination warrants
judicial attention and respect.**

**3. In determining the appropriate penalty, the Court should
begin by determining the statutory maximum penalty. *United States
v. Smithfield Foods, Inc., supra*, 191 F.3d at 528. *Accord Atlantic
States Legal Foundation, Inc. v. Tyson Foods, Inc., supra*, 897 F.2d**

at 1142; *Hawaii's Thousand Friends v. Honolulu*, 821 F. Supp. 1368, 1394-1395 (D. Haw. 1993). See also *United States v. B&W Investment Props.*, 38 F.3d 362, 368 (7th Cir. 1994), certiorari denied, 115 S. Ct. 1998 (1995) ("In considering fines under the [Clean Air] Act, courts generally presume that the maximum penalty should be imposed").

4. Once the Court has calculated the statutory maximum penalty, it may apply either the "top-down" or the "bottom-up" method to assess the appropriate civil penalty for the violations at issue. *United States v. Smithfield Foods, Inc.*, *supra*, 191 F.3d at 528. The "top-down" method means that the "court begins with the statutory maximum and adjusts downward based on its evaluation of §309(d) factors." *Id.*, at 528, n. 7. In the "bottom-up" method, "the court begins with the violator's estimated economic benefit from non-compliance * * * and then adjusts up or down based on the court's evaluation of the six factors set out in §309(d)." *Id.*, at 528.

5. Section 309(d) of the Act, 33 U.S.C. 1319(d), provides:

In determining the amount of a civil penalty the court shall consider the seriousness of the violation or violations, the economic benefit (if any) resulting from the violations, any history of such violations, any good faith efforts to comply with the applicable requirements, the economic impact of the penalty on the violator, and such other matters as justice may require.

6. The Court concludes that the Defendant has violated the discharge limitations of its permit for 91 days, the monitoring requirements 396 times, the reporting requirements 323 times and the schedule of compliance on 54 days. These violations are proven by defendant's own DMR's, laboratory reports and operating logs (*see Environmental Defense Fund, Inc. v. Lamphier*, 714 F.2d 331, 339 (4th Cir. 1983)) and the testimony of plaintiffs' expert, Dr. Bell.

7. The Court concludes that the Defendant exceeded the discharge limitations of its permit for 91 days (30 maximum violations and 2 monthly average violations).

8. The Court concludes that paragraph A(8) of Part III of the Defendant's 1991 permit does not establish discharge limitations, and therefore the Defendant is not liable for any discharge violations with respect to this provision.

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9. The Court concludes that the Defendant was not required to comply with the Phase II limitations in its 1991 permit until April 2, 1993, and therefore the Defendant is not liable for any exceedances of those limitations prior to April 2, 1993.

10. The Court concludes that paragraph A(8) of Part III of the Defendant's 1991 permit establishes monitoring requirements only, and therefore the Defendant is liable for its 160 failures to monitor to the minimum detection levels which its laboratories were capable on a consistent basis of analyzing for cadmium, copper and lead. See Finding of Fact 64, 78, 122A.

11. The Court concludes that the Defendant violated its permit 323 times by not reporting its exceedances of the discharge limitations and violations of the monitoring requirements in its NPDES permits.


12. The Defendant is not liable for failing to report its exceedances of the Phase II limitations for the period prior to April 1, 1993.

13. The Court concludes that the Defendant enjoyed no economic benefit from its noncompliance with its NPDES permit.

14. The Plaintiff urges the Court to find that the Defendant's violations of its NPDES permit are serious and that in determining the amount of penalty to be imposed against the Defendant, the Court should include the sum of \$836,000 which, the Plaintiff argues, is suggested by the policies of the EPA. Section 309(d) of the Act, 33 U.S.C. 1319(d), provides:

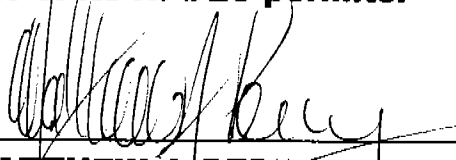
In determining the amount of a civil penalty, the court shall consider the seriousness of the violation or violations, the economic benefit (if any) resulting from the violation(s), any history of such violation(s), any good faith efforts to comply with the applicable requirements, the economic impact of the penalty on the violator and such other matters as justice may require.

The Court has considered all of the factors included in the statute and concludes that, notwithstanding the seriousness of the violations stated herein, it appears to the Court that the Defendant has made a good faith effort to comply with the requirements of its permit. Also it appears that the Defendant has not enjoyed economic benefit because of its noncompliance. Finally, and notwithstanding the above, the Defendant is required to pay a substantial penalty as provided by law together with other remedies which the Act gives the Plaintiffs as the prevailing parties.



Therefore, the Court concludes that the amount of penalty the Defendant must pay for violations of its permit will not include the enhancement urged by the Plaintiffs.

15. The Court concludes that defendant must pay a penalty of \$2,340,000 for its violations of its NPDES permits.



MATTHEW J. PERRY, JR.
SENIOR UNITED STATES DISTRICT JUDGE

July 18, 2003
Columbia, South Carolina